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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,650	07/03/2001	John G. Apostolopoulos	10012168	9591

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EXAMINER	
KOENIG, ANDREW Y	
ART UNIT	PAPER NUMBER
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/898,650	APOSTOLOPOULOS ET AL.	
	Examiner	Art Unit	
	Andrew Y. Koenig	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 14-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01 October 2007 have been fully considered but they are not persuasive.

The applicant argues that the combination of Matsushita and Kosaka fails to teach "wherein said client uses information from said power strength monitor to make a decision about how many of said multiple description bitstreams to receive, as recited in claims 1 and similarly in independent claims 8 and 18. The examiner disagrees; Matsushita teaches media push engines (servers) adapting to network congestion by adding additional media push engines to compensate for their own local traffic (col. 4, ll. 28-46). Matsushita teaches each media push engine determines whether it is capable of serving the requested stream components, and can remove components (e.g. one of the multiple bitstreams), and another server (with lower congestion – thereby capable of providing a higher level of service) will supply this missing component (e.g. the particular multiple description bitstream) (see fig. 7-8, col. 8, ll. 52-58, col. 9, ll. 12-17, col. 9, ll. 31-51, col. 10, ll. 16-22). As such, it is clear that Matsushita uses information about the physical characteristics of the network (such as congestion), however the examiner recognizes that Matsushita does not teach "power strength monitor" to alter the received multiple bitstreams, in that Matsushita teaches the network characteristic of a congestion. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56), wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches

sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). As such, one of ordinary skill in the art would readily recognize that in a wireless network, congestion and power are both characteristics of the network. Since both Matsushita and Kosaka rely on the characteristics of the network to make decisions and one would readily recognize that switching to different networks introduces different inherent network characteristics, one of ordinary skill in the art at the time the invention was made would readily recognize that the combination of Matsushita and Kosaka teach that the client uses information from said power strength monitor to make a decision about how many of said multiple bitstreams to receive.

Furthermore, the applicant argues that Matsushita would teach away from the claimed embodiments in that all subsequent admission control decisions being made by the media push engines themselves and notes that nowhere does Matsushita teach, describe, or suggest the multimedia client sending comments, controlling the media push engines, or controlling which sub-stream components are received. The examiner disagrees; the mere fact that Matsushita teaches all subsequent admission control decisions being mad by the media push engines (MPE) themselves is directed to a distributed processing system which is clearly aware of inherent network characteristics, such as network congestion. As such, the relied upon portion (col. 4, ll. 28-32) does not teach away but teaches the distribution of load based upon the network. Moreover, it is clear that within both Matsushita and Kosaka that both systems are aware of the

network and the devices connected to the network (Matsushita – teaches RTCP and control messages between the participants – col. 7, ll. 30-41).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5-10, 12, 14-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) in view of U.S. Patent 7,062,250 to Kosaka.

Regarding claim 1, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21).

Matsushita teaches adjusting the number of media push engines based upon network traffic congestion (col. 4, ll. 28-46), wherein said multiple description receiving portion receives a particular multiple description bitstream from a first server that said particular multiple description bitstream is stored on based on a (at least one) level of

service said first server is capable of providing, and said multiple description receiving portion potentially receives said particular multiple description bitstream at a later time from a second server because said particular multiple bitstream was redistributed to said second server because said second server is capable of providing a higher level of service than said first server (see fig. 7-8, col. 8, ll. 52-58, col. 9, ll. 12-17, col. 9, ll. 31-51, col. 10, ll. 16-22).

Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll.10-12).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56) , wherein said client uses

information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 2, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 3, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41).

Regarding claim 5, Matsushita teaches a display device on a computer (label 16).

Regarding claim 6, Matsushita teaches presenting the stream (col. 10, ll. 20-22, col. 11, ll. 13-18), wherein the stream can be audio and/or video (col. 11, ll. 13-18), and must inherently have an audio output in order to present the stream to the user.

Regarding claim 7, Matsushita teaches transmitting information, related to the operation characteristics of the client to the push engines (col. 9, ll. 37-41).

Regarding claims 8, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 47-4), which reads on receiving a first and second multiple description bitstreams at the client. Matsushita teaches the format of the data as using video, such as MPEG (col. 7, ll. 12-14), which inherently stores and decodes the bitstreams for presentation (col. 11, ll. 13-17). Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), for presenting the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll.10-12).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on

monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56) , wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 9, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 10, Matsushita inherently stores the first and second bitstreams in respective memory portions in order to prevent data from being overwritten by another packet before being used.

Regarding claim 12, Matsushita teaches determining operation characteristics by monitoring the characteristics of channels on which said first and second streams are received (col. 9, ll. 37-41).

Regarding claim 14, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54).

Regarding claim 15, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 16, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 17, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmitting information related to appropriate operation

characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

Regarding claim 18, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21). Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll.10-12, col. 11, ll. 13-18).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on monitoring power consumption by said client, wherein said client uses information about

said power consumption to make a decision. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56) , wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 19, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 20, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41).

Regarding claim 22, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 23, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 24, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmission means coupled to said synchronization module, wherein the transmission means transmits information related to operation characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

4. Claims 4, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) and U.S. Patent 7,062,250 to Kosaka in view of "Error-Resilient Video Compression" (Apostolopoulos).

Regarding claim 4, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186,

section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 11, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 21, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with

NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Koenig whose telephone number is (571) 272-7296. The examiner can normally be reached on M-Fr (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Y Koenig
Primary Examiner
Art Unit 2623

ayk